

Mechanical Lung (Rear View)



Inhalation

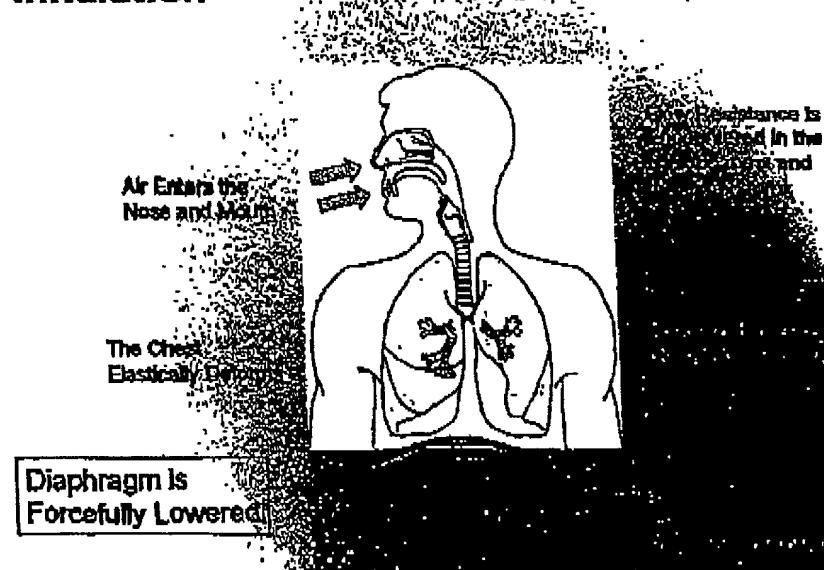


FIG. I

Exhalation

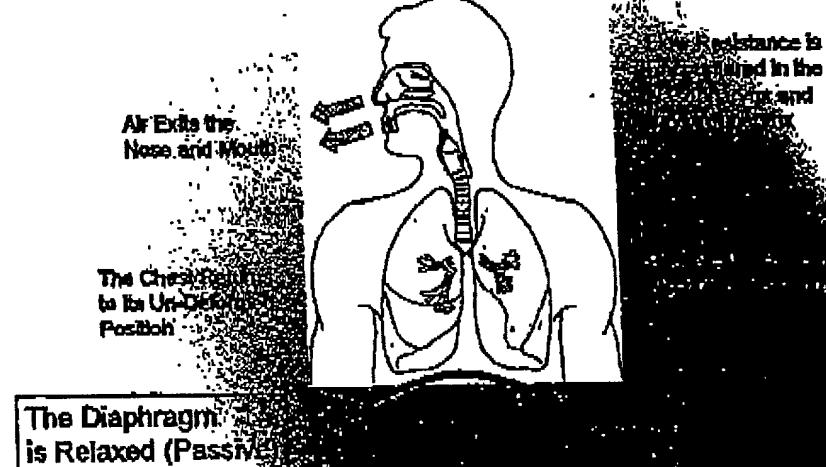
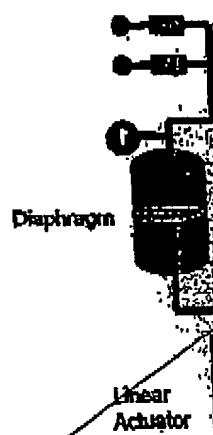


FIG. 2

Respiration Control



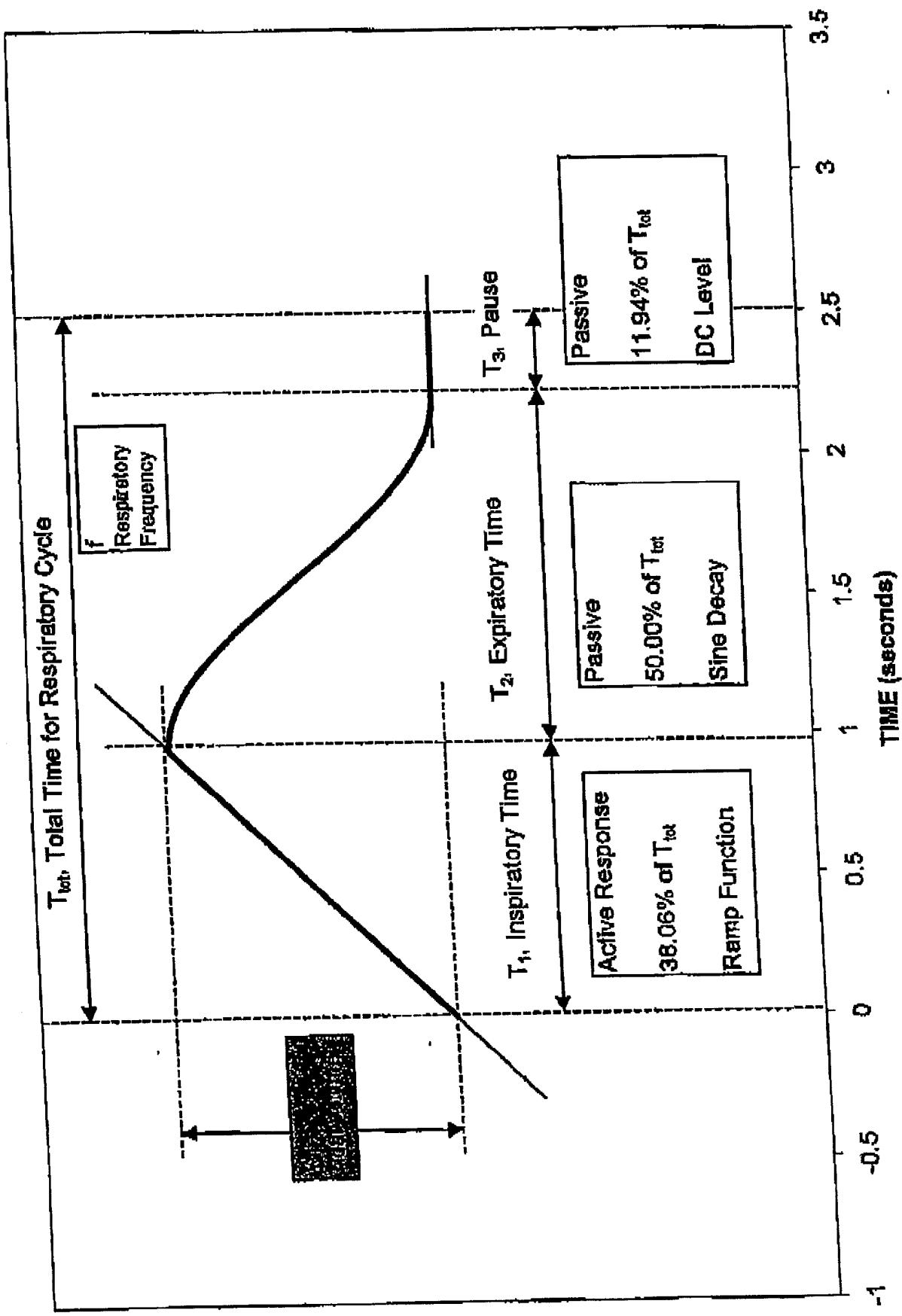


FIG. 3

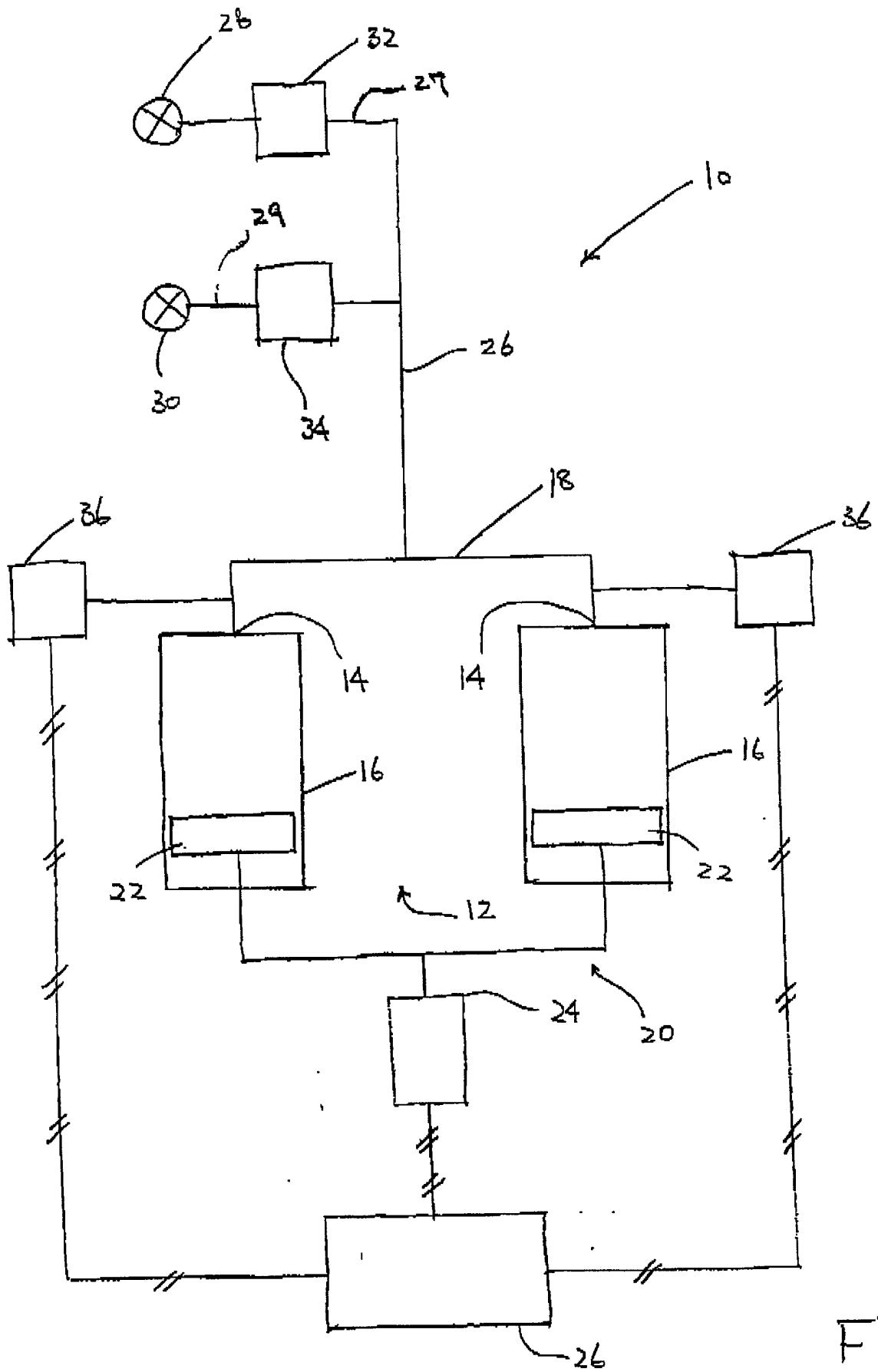


FIG. 4

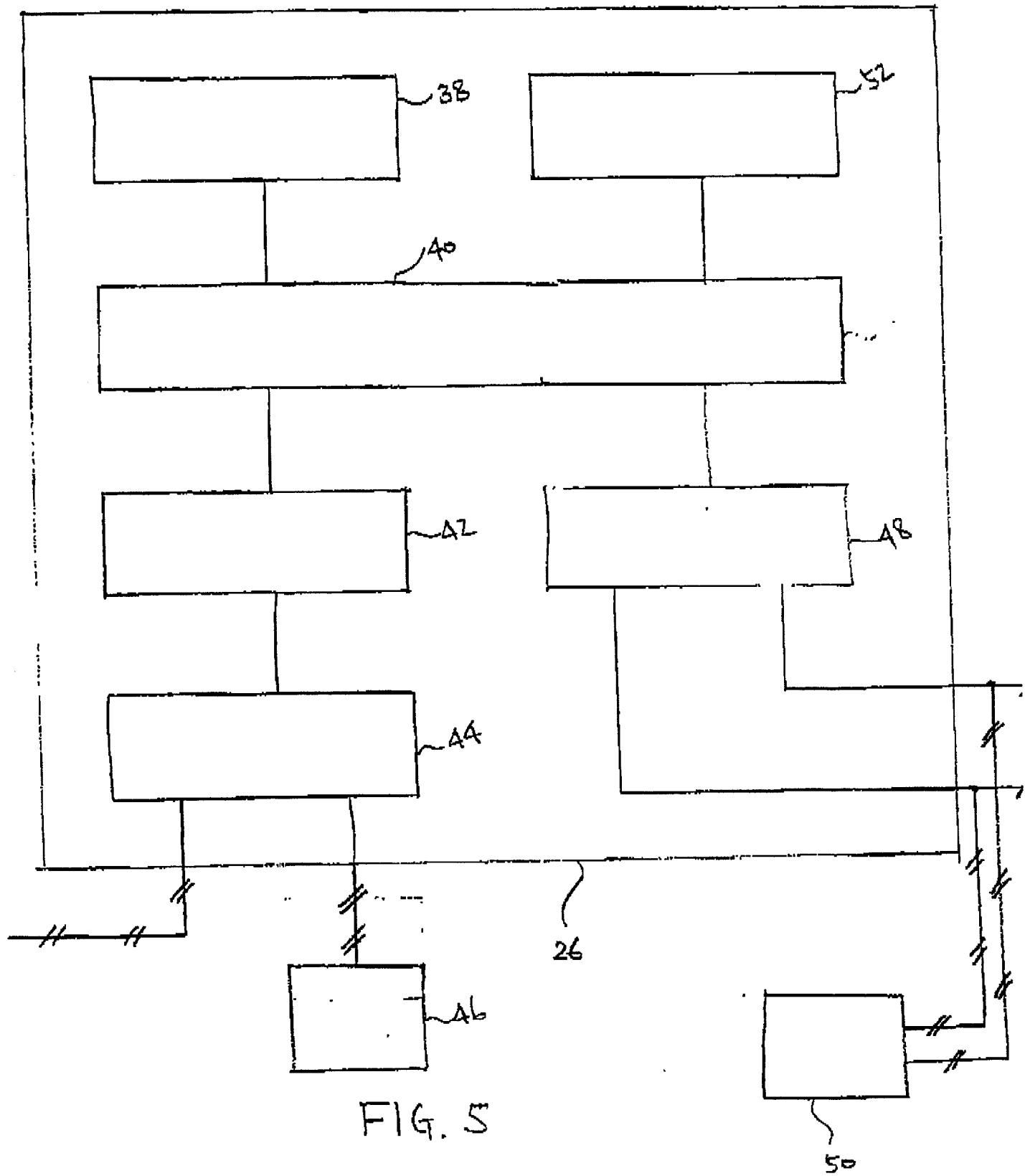
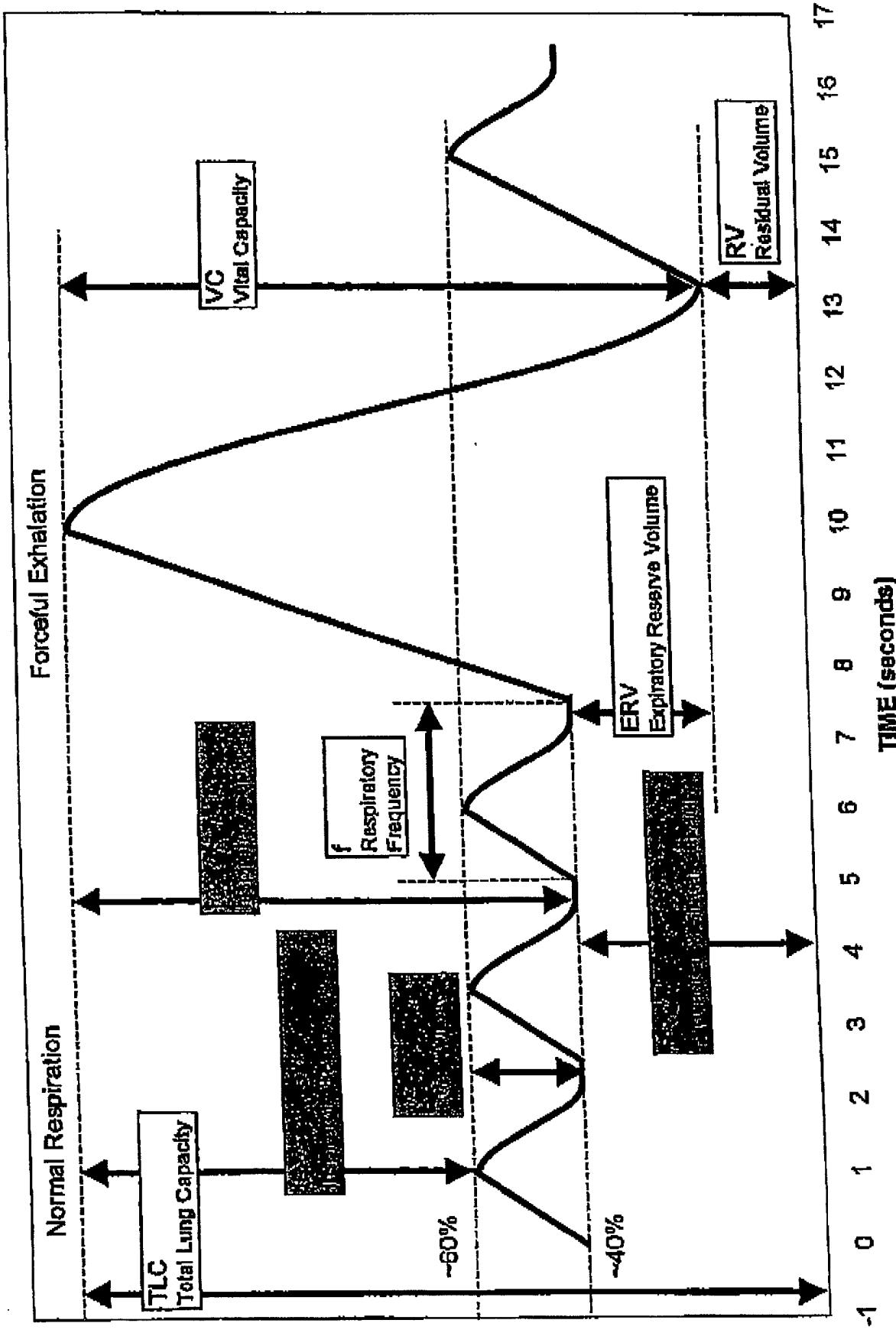


FIG. 5

FIG. 6



Calibration (Model Lung and Linear Actuator)		Position (mm)		Position (mm)		Position (mm)	
		(Inches)	(m)	(Inches)	(m)	(Inches)	(m)
BaseLine (0.03-Inches, 0.0 mm)		0.00	0.00	80	190		
Fully Extended (8.50-Inches, 5.0 mm)		8.00	0.20	985	1990		
Wml				0.0055	0.0077		
WmV				183	398		
Enter values at "red" tank only.							
Normal Respiration Cycle							
Total Time (1 Respiration Cycle)	Tot (sec)	2.868	2.777	2.866	3.143	3.426	3.819
Total Time (1 Respiratory Cycle)	T1 (sec)	0.852	0.853	1.087	1.142	1.223	1.269
Inspiratory Time (T1), Ramp, 38.05%	T1 (sec)	1.250	1.354	1.429	1.532	1.607	1.714
Expiratory Time (T2-T3), Sine Decay, 50%	T2 (sec)	0.311	0.326	0.341	0.356	0.371	0.384
Expiratory Time (T2-T3), DC Decay, 11.84%	T3 (sec)	0.289					
Programming Settings:							
RAMP	RS (V)	0.2814	0.5489	1.0164	1.1913	1.3861	2.3024
RAMP	RE (V)	0.4845	0.9095	1.3124	1.5216	1.7213	2.2355
Start							
End							
SINE	SA (V)	0.1088	0.1288	0.1530	0.1653	0.1778	0.2231
Ampitude	SD (V)	0.3880	0.7737	1.1684	1.3565	1.6437	2.0346
Offset	SF (Hz)	0.4000	0.3833	0.3687	0.3500	0.3333	0.3222
Freq (Hz)	SP (deg)	90	90	90	90	90	90
Phase							
DC LEVEL	D0 (V)	0.2814	0.8488	1.0164	1.1913	1.3861	2.3024
Offset							

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Manikin Connections

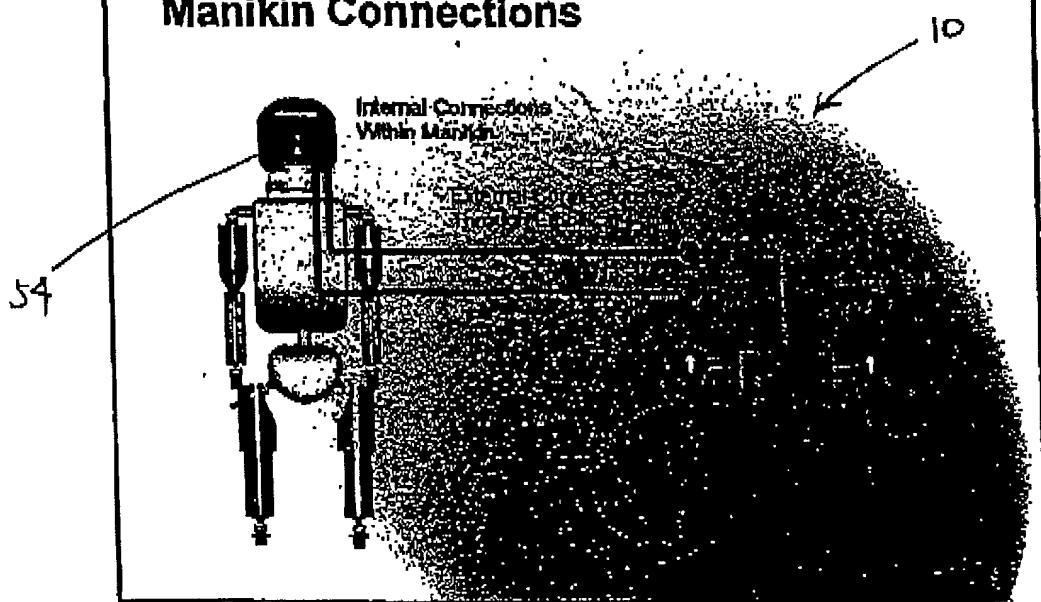


FIG. 8

Manikin Connections

